

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A computer-readable medium having a data structure for managing reproduction of at least multiple reproduction path video data recorded on the computer-readable medium, comprising:

one or more management areas storing path change information, the path change information indicating where changes in reproducing at least one of the reproduction paths of video data are permitted, the one or more management areas being separate from a data area storing the video data; and

wherein the path change information includes at least one entry point map associated with each reproduction path, each entry point map identifying entry points in the video data for the associated reproduction path including at least one flag, each flag associated with an entry point and identifying whether a change in reproduction path is permitted in relation to the entry point.

2. (Canceled)

3. (Previously Presented) The computer-readable medium of claim 1, wherein flags permitting a change in a same associated reproduction path define one or more units of video data.

4. (Previously Presented) The computer-readable medium of claim 3, further comprising:
a data area having at least the video data recorded therein, and at least a portion of the video data being multiplexed on a unit of video data basis.

5. (Previously Presented) The computer-readable medium of claim 4, wherein the

reproduction paths of video data are different camera angles of video data.

6. (Previously Presented) The computer-readable medium of claim 3, wherein each unit of video data starts with an I-picture.

7. (Previously Presented) The computer-readable medium of claim 3, wherein each unit of video data starts with a closed group of pictures (GOP).

8. – 14. (Canceled)

15. (Previously Presented) The medium of claim 3, wherein the entry point maps are aligned in time.

16. (Previously Presented) The computer-readable medium of claim 3, wherein an active flag associated with an entry point indicates that changing reproduction paths is permitted after reproducing the entry point having the associated active flag.

17. (Previously Presented) The computer-readable medium of claim 3, wherein an active flag associated with an entry point indicates that changing reproduction paths is permitted before reproducing the entry point having the associated active flag.

18. (Previously Presented) A method of recording a data structure for managing reproduction of at least multiple reproduction path video data on a recording medium, comprising:

recording path change information in one or more management areas of the recording medium, the path change information indicating where changes in reproducing at least one of

the reproduction paths of video data are permitted, the one or more management areas being separate from a data area storing the video data; and

wherein the path change information includes at least one entry point map associated with each reproduction path, entry point map identifying entry points in the video data for the associated reproduction path and including at least one flag, each flag associated with an entry point and identifying whether a change in reproduction path is permitted in relation to the entry point.

19. (Previously Presented) A method of reproducing a data structure for managing reproduction of at least multiple reproduction path video data recorded on a recording medium, comprising:

reproducing path change information from one or more management areas of the recording medium, the path change information indicating where changes in reproducing at least one of the reproduction paths of video data are permitted, the one or more management areas being separate from a data area storing the video data; and

wherein the path change information includes at least one entry point map associated with each reproduction path, each entry point map identifying entry points in the video data for the associated reproduction path and including at least one flag, each flag associated with an entry point and identifying whether a change in reproduction path is permitted in relation to the entry point.

20. (Previously Presented) An apparatus for recording a data structure for managing reproduction of at least multiple reproduction path video data on a recording medium, comprising:

an optical recording device configured to record data on the recording medium;
an encoder configured to encode at least multiple reproduction path video data;

and a controller configured to control the optical recording device to record the encoded multiple reproduction path video data on the recording medium, the controller configured to control the optical recording device to record path change information in one or more management areas of the recording medium, the path change information indicating where changes in reproducing at least one of the reproduction paths of video data are permitted, the one or more management areas being separate from a data area storing the video data; and

wherein the path change information includes at least one entry point map associated with each reproduction path, each entry point map identifying entry points in the video data for the associated reproduction path and including at least one flag, each flag associated with an entry point and identifying whether a change in reproduction path is permitted in relation to the entry point.

21. (Previously Presented) An apparatus for reproducing a data structure for managing reproduction of at least multiple reproduction path video data recorded on a recording medium, comprising:

an optical reproducing device configured to reproduce data recorded on the recording medium;

a controller configured to control the optical reproducing device to reproduce path change information from one or more management areas of the recording medium, the path change information indicating where changes in reproducing at least one of the reproduction paths of video data are permitted, the one or more management areas being separate from a data area storing the video data; and

wherein the path change information includes at least one entry point map associated with each reproduction path, each entry point map identifying entry points in the video data for the associated reproduction path and including at least one flag, each flag associated with an entry point and identifying whether a change in reproduction path is permitted in relation to the

entry point.

22. (Previously Presented) The method of claim 18, wherein flags permitting a change in a same associated reproduction path define one or more units of video data.

23. (Previously Presented) The method of claim 22, wherein at least one portion of the video data is recorded in a data area with being multiplexed on a unit of video data basis.

24. (Previously Presented) The method of claim 23, wherein the reproduction paths of a video are different camera angles of video data.

25. (Previously Presented) The method of claim 19, wherein flags permitting a change in a same associated reproduction path define one or more units of video data.

26. (Previously Presented) The method of claim 25, wherein at least a portion of the video data is recorded in a data area with being multiplexed on a unit of video data basis.

27. (Previously Presented) The method of claim 26, wherein the reproduction paths of video data are different camera angles of video data.

28. (Previously Presented) The apparatus of claim 20, wherein flags permitting a change in a same associated reproduction path define one or more units of video data.

29. (Previously Presented) The apparatus of claim 20, wherein an active flag associated with an entry point indicates that changing reproduction paths is permitted after reproducing the entry point having the associated active flag.

30. (Previously Presented) The apparatus of claim 21, wherein flags permitting change in a same associated reproduction path define one or more units of video data.

31. (Previously Presented) The apparatus of claim 21, wherein an active flag associated with an entry point indicates that changing reproduction paths is permitted after reproducing the entry point having the associated active flag.

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END OF CLAIMS